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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application

FEB 0 9 1938

EINKAUF et al.

Examiner: Unassigned

Filed: February 20, 1997

Title: METHOD AND APPARATUS FOR ADJUSTING GRAPHICS PROCESSING PROCEDURES BASED ON A SELECTABLE SPEED/QUALITY GAUGE

## **CERTIFICATE OF MAILING UNDER 37 C.F.R.§ 1.8**

## SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R.§1.97

Assistant Commissioner for Patents Washington, D.C. 20231

Sir:

Listed below in Appendix A or on an attached Form PTO-1449 is information known to Applicant. A copy of each listed publication and U.S. and foreign patent, except for pending U.S. applications, is being submitted herewith, along with a concise explanation of information in a foreign language, if any, pursuant to 37 C.F.R. '1.97-1.98.

If form PTO-1449 is enclosed, the Examiner is requested to initial and return it in accordance with MPEP '609. Applicant respectfully request that the listed information be considered by the Examiner and be made of record in the above-identified application.

This statement is not intended to represent that a search has been made or that the information cited in the statement is, or is considered to be, material to patentability as defined in '1.56.

This statement qualifies under 37 C.F.R. '1.97, subsection b because to the best knowledge of the Applicant; It is being filed before the mail date of the first Office Action on the merits. If this statement is received by the USPTO after the mailing date of the first Office Action; the Commissioner is hereby authorized to charge Applicant's deposit account number 03-2028 for the fee of \$240 as required 37 C.F.R. '1.97, subsection c and set forth in 37 C.F.R. '1.17(p).

Respectfully submitted,

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all Considered

ATION.

11/14/1994

LAY LIST PROCESSOR FOR OPERATING IN PROCESSOR AND COPROCESSOR MODES

Thomas A. Dye

U.4. Pat. No. 5,706,478

08/574,835

12/19/1995

METHOD AND APPARATUS FOR PREFETCHING A NEXT INSTRUCTION USING DISPLAY LIST

PROCESSING IN A GRAPHICS PROCESSOR

Michael K. Larson

08/574,889

12/19/1995

METHOD AND APPARATUS FOR OBJECT IDENTIFICATION AND COLLISON DETECTION IN THREE

DIMENSIONAL GRAPHICS SPACE

Goran Devic

U.S. Pat. No. 5,812,138

08/670,299

06/27/1996

TEXTURE MAP PACKING

Christopher W. Shaw

08/671,138

06/27/1996

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Michael K. Larson

Daniel P. Wilde

U.S. Pat. No. 5798,763

08/671,977

06/28/1996

IMPROVED SYSTEM AND METHOD OF RENDERING POLYGONS INTO A PIXEL GRID

Michael K. Larson

Daniel P. Wilde

08/672,613

06/28/1996

PARALLEL MULTIPLY ACCUMULATE ARRAY CIRCUIT

Thomas M. Ogletree U. 4, Pat. No. 5,784,306

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06/28/1996

REGISTER SET REORDERING FOR A GRAPHICS PROCESSOR BASED UPON THE TYPE OF PRIMITIVE

TO BE RENDERED

Michael K. Larson

U.4. Pat. No. 5,793,386

Pat Harkin

08/672,642

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EMBEDDING A TRANSPARENCY ENABLE BIT AS PART OF A RESIZING BIT BLOCK TRANSFER

**OPERATION** 

Thomas A. Dye

abandoned.

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**OBJECT REFERENCED MEMORY MAPPING** 

Michael K. Larson

U.S. Pat. No. 5,758,128

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Daniel P. Wilde

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DYNAMIC SWITCHING OF TEXTURE MIP-MAPS BASED ON DEPTH USING A SOFTWARE GRAPHIC

**ENGINE** 

Gautam P. Vaswani

08/720,396 09/30/1996

VIRTUAL ADDRESSING FOR SUBSYSTEM DMA

Timothy J. McDonald Michael K. Larson

Tom Albers

08/724,566 09/30/1996

A METHOD OF OBTAINING A BUFFER OF CONTIGUOUS MEMORY AND BUILDING A PAGE TABLE

Goran Devic

08/724,616 09/30/1996

DYNAMIC SWITCHING OF TEXTURE MIP-MAPS BASED ON PIXEL DEPTH VALUE

Gautam P. Vaswani

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Goran Devic

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TILED LINEAR HOST TEXTURE STORAGE

Daniel P. Wilde

Timothy J. McDonald

08/774,787 12/30/1996

NON-HOMOGENOUS 2ND ORDER PERSPECTIVE TEXTURE MAPPING USING LINEAR

INTERPOLATION PARAMETERS

Gautam P. Vaswani

Thomas A. Dye

Michael K. Larson

08/777,556 12/30/1996

CIRCUIT FOR DETERMINING NON-HOMOGENOUS SECOND ORDER PERSPECTIVE TEXTURE

MAPPING COORDINATES USING LINEAR INTERPOLATION

Gautam P. Vaswani

Daniel P. Wilde

Thomas A. Dye

Michael K. Larson

08/777,557 12/30/1996

IMPROVED DITHERING METHOD AND APPARATUS USING RAMP PROBABILITY LOGIC

Daniel P. Wilde

08/777,558 12/30/1996

METHOD FOR COMPUTING PARAMETERS USING IN A NON-HOMOGENOUS SECOND ORDER

PERSPECTIVE TEXTURE MAPPING PROCESS USING INTERPOLATION

Mark A. Einkauf

Michael K. Larson

All constatel
8/13/148



08/803,460

02/20/1997

METHOD FOR TRIANGLE SUBDIVISION IN COMPUTER GRAPHICS TEXTURE MAPPING TO ELIMINATE ARTIFACTS IN HIGH PERSPECTIVE POLYGONS

Mark A. Einkauf

08/803,461 -- 02/20/1997

METHOD AND APPARATUS FOR ADJUSTING GRAPHICS PROCESSING PROCEDURES BASED ON A SELECTABLE SPEED/QUALITY GALIGE

Mark A. Einkauf

Thomas A. Dye

Goran Devic

08/811,491

03/05/1997

TEXTURE MAP STORAGE WITH UV REMAPPING

Daniel P. Wilde

08/818.053

03/14/1997

METHOD AND APPARATUS FOR SHORTEN DISPLAY LIST INSTRUCTIONS

Goran Devic

08/828,528

03/31/1997

A METHOD AND SYSTEM FOR EFFICIENT REGISTER SORTING FOR THREE DIMENSIONAL

**GRAPHICS** 

Thomas M. Ogletree

Mark A. Einkauf

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03/31/1997

TEXTURE MAP SCALING IN THE FREQUENCY DOMAIN

Thomas M. Ogletree

Thomas A. Dye

08/831,283

03/31/1997

DYNAMICALLY SELECTABLE TEXTURE FILTER FOR COMPUTER GRAPHICS

Gautam P. Vaswani

Daniel P. Wilde

Thomas A. Dye

08/832,789

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METHOD FOR INDIRECT ADDRESSING IN RISC CORE

Thomas M. Ogletree

08/852,468

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METHOD AND APPARATUS FOR INTERNALLY CACHING THE MINIMUM AND MAXIMUM XY PIXEL ADDRESS VALUES IN A GRAPHICS SUBSYSTEM

Daniel P. Wilde

08/854,654

05/12/1997

DYNAMIC PIPELINE FOR A PROCESSOR

Thomas A. Dye

U.S. Pat. No. 5,778,250

all considered 8/13/48 CV

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05/15/1997

SOFTWARE-BASED DITHERING METHOD AND APPARATUS USING RAMP PROBABILITY LOGIC

Gautam Vaswani Daniel P. Wilde Thomas Dye

08/892,073

07/14/1997

METHOD OF SYNCHRONIZING MULTIPLE MEMORY BUFFERS FOR GRAPHICS ANIMATION

Thomas A. Dye Bradley A. May Mike X. Cui

08/932,402

09/17/1997

CHROMA KEYED SPECULAR TEXTURE MAPPING IN A GRAPHICS PROCESSOR

Christopher W. Shaw

Goran Devic

08/932,760

09/17/1997

SELECTABLE MODE SMOOTHING TEXTURE FILTER FOR COMPUTER GRAPHICS

Goran Devic

Christopher W. Shaw

08/944,946

10/02/1997

MASTER INPUT/OUTPUT PROCESSING

Michael K. Larson Timothy J. McDonald

08/993,679

09/19/1997

**OPTIMIZED FIFO MEMORY** 

Patrick A. Harkin

08/478,860 05/10/95

CONTROLLING A REAL-TIME RENDERING ENGINE USING A LIST-BASED CONTROL MECHANISM

wow U.S. PW. No. 5,748,762

=> s polygon# and (speed or quality)

15538 POLYGON# 572580 SPEED 285143 QUALITY

L1 7756 POLYGON# AND (SPEED OR QUALITY)

=> s linear texture or perspective texture

341556 LINEAR 35465 TEXTURE

8 LINEAR TEXTURE

(LINEAR (W) TEXTURE)

704400 PERSPECTIVE

35465 TEXTURE

4 PERSPECTIVE TEXTURE

(PERSPECTIVE (W) TEXTURE)

L2 11 LINEAR TEXTURE OR PERSPECTIVE TEXTURE

 $\Rightarrow$  s 11 and 12

L3 6 L1 AND L2

=> d 1-6

- 1. 5,793,386, Aug. 11, 1998, Register set reordering for a graphics processor based upon the type of primitive to be rendered; Michael Kerry Larson, et al., 345/522, 501, 513
- 2. 5,704,024, Dec. 30, 1997, Method and an apparatus for generating reflection vectors which can be unnormalized and for using these reflection vectors to index locations on an environment map; Douglas Voorhies, et al., 345/426 [IMAGE AVAILABLE]
- 3. 5,680,525, Oct. 21, 1997, Three-dimensional graphic system with an editor for generating a textrue mapping image; Toshio Sakai, et al., 345/430 [IMAGE AVAILABLE]
- 4. 5,544,292, Aug. 6, 1996, Display apparatus having a display processor for storing and filtering two dimensional arrays forming a pyramidal array, and method of operating such an apparatus; Paul A. Winser, 345/430, 507 [IMAGE AVAILABLE]
- 5. 5,495,563, Feb. 27, 1996, Apparatus for converting pyramidal texture coordinates into corresponding physical texture memory addresses; Paul A. Winser, 345/430 [IMAGE AVAILABLE]
- 6. 4,586,038, Apr. 29, 1986, True-perspective texture/shading